

WHAT IS CLAIMED IS

Patent Claims

Sub A1Z

1. A method for detecting target objects and for determining their direction, range, speed and the like for a radar device (3) in particular for use in motor vehicles, comprising the following method steps:

5 - arrangement of at least three transmitting and receiving devices (A, B, C, D, E) for radar beams in such a manner that their beam fields (a, b, c, d, e) form the detection area (4) of the radar device (3),

10 - successive activation and deactivation of the at least three transmitting and receiving devices (A, B, C, D, E) in such a manner that at least two adjacent transmitting and receiving devices are operated simultaneously, and

15 - evaluation of the echo signals from the transmitting and receiving devices (A, B, C, D, E) using the monopulse method.

20

2. The method as claimed in claim 1, characterized in that one, and only one, pair of adjacent transmitting and receiving devices (A, B, C, D, E) are activated simultaneously.

25

3. The method as claimed in one of claims 1 or 2, characterized in that at least one of the currently deactivated transmitting and receiving devices (A, B, C, D, E) is reactivated for activation of the at least two transmitting and receiving devices (A, B, C, D, E).

30

35

4. The method as claimed in one of claims 1 to 3, characterized in that the echo signals from the

transmitting and receiving devices (A, B, C, D, E) are evaluated individually on the basis of range, speed and intensity.

5 5. The method as claimed in one of claims 1 to 4, characterized in that the position angle of the target object relative to the radar device (3) is determined by comparison of the intensities of the at least two transmitting and receiving devices (A, B, C, D, E).

4500 4500 4500 4500 4500 4500